

REMARKS:

In the outstanding Office Action, the Examiner rejected claims 9 and 10 were objected to, and claims 1-8 and 11-26 were rejected. Claims 1, 9, 10 and 22-26 are amended herein, and new claim 27 is added. No new matter is presented. Thus, claims 1-27 are pending and under consideration. The rejections are traversed below.

ALLOWABLE CLAIMS:

At page 20 of the outstanding Office Action, the Examiner indicated that claims 9 and 10 would be allowable if rewritten in independent form. Claim 9 is amended herein to be in independent form and includes all the features of the intervening claims and claim 10 depends from claim 9, and thus, includes features of the intervening claims.

Therefore, it is respectfully submitted that claims 9 and 10 should be allowed.

Rejection under 35 U.S.C. § 102(e):

Claims 1-6, 11-16 and 22-26 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,144,989 (Hodjat).

Hodjat broadcasts a message via agents having distribution information of all downchain agents until an agent claiming domain responsibility receives the message. The Hodjat interpreter unit provided to each agent determines whether a message is within a domain of responsibility of the respective agent (see, col. 7, lines 34-39). Then, based on the determination by the interpreter unit, the agents receive and reply to the messages using a standard agent communication language (see, col. 7, lines 7-17 and col. 13, line 60 through col. 14, line 1). That is, Hodjat is limited to sequentially transmitting or passing a message to the next agent in a path upon a determination that the message is not within a domain of responsibility of a particular agent.

The present invention defines or dedicates a virtual communication channel based on role and policy information of the agents and allows the agents having the role and policy information to communicate with each other using the defined virtual communication channel. Thus, the broadcasting of a message in Hodjat is unlike the present invention's virtual communication channel defined based on role and policy information before exchange of information between the agents.

Independent claims 1 and 22-25 a amended recite, "a policy that is a collection of rules

containing a rule representing a relationship between attribute[s] of an agent and a role assigned in accordance with the attributes” where the policy is used to “define a virtual communication channel” to enable agents to communicate with one another using the virtual communication channel “defined” based on the policy.

Independent claim 26 also recites that the present invention includes, “assigning each of the agents a role in accordance with a corresponding attribute of each agent and based on policy information..., the policy being used to define a virtual communication channel” and “dynamically connecting the agents to each other based on the policy information through the virtual communication channel defined”.

It is submitted that the independent claims 1 and 22-25 are patentable over Hodjat.

For at least the above-mentioned reasons, claims depending from independent claim 1 are patentably distinguishable over Hodjat. The dependent claims are also independently patentable. For example, as recited in claim 6, “a policy generated by an agent is distributed to another agent, the agent having received the distributed policy obtains a role in accordance with attributes of the agent using the role assignment part based on the policy, thereby installing the processing execution part” and “a virtual communication channel is formed among agents having the distributed policy in common”.

The Hodjat method does not teach or suggest “a policy generated by an agent is distributed to another agent, the agent having received the distributed policy obtains a role in accordance with attributes of the agent...” and “a virtual communication channel is formed among agents having the distributed policy in common”, as recited in claim 6.

Therefore, withdrawal of the rejection is respectfully requested.

Rejection under 35 U.S.C. § 103(a):

Claims 7, 8 and 17-21 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hodjat in view of U.S. Patent No. 6,513,059 (Gupta).

Gupta is directed to a message blackboard system based on subscription of agents where an agent that subscribes to rules of a node is able to post and read a message posted on a particular blackboard (see, column 5, line 65 through column 6, line 3 and column 11, lines 29-39).

The combination of Hodjat and Gupta does not teach or suggest an agent collaboration system “defining a virtual communication channel based on a policy” having rules representing a

relationship between an attribute of an agent to enable an agent to communicate with other agents through the defined virtual communication channel as recited in independent claim 1 upon which claims 7, 8 and 17-21 depend.

Further, the combination of Hodjat and Gupta does not teach or suggest an agent collaboration system where “each agent obtains a required policy from the policy repository and stores it in the policy storing part” (claim 7), “an authentication entity authenticates access right of each agent to the virtual communication channel” (claim 8) and “an unauthorized access detecting part detects unauthorized access” (claim 20), “the virtual communication channel is self-destroyed when the expiration date has come” (claim 19), “cancels connection to the virtual communication channel” upon a request (claim 21) and “invalidates the role” (claim 17) or “ignores a message having the LABEL information” (claim 18) when the expiration date has come.

Therefore, withdrawal of the rejection is respectfully requested.

New Claim:

New claim 27 is added to recite, “defining a virtual communication channel for generating a virtual community among a selected number of the agents based on a role assigned to the agents and policy information including rules representing a relationship between attributes of the agents” and “connecting the selected number of agents to each other and exchanging information between the agents in the virtual community using the defined virtual communication channel”.

It is respectfully submitted that Hodjat and Gupta, alone or in combination, do not teach or suggest, “defining a virtual communication channel for generating a virtual community among a selected number of the agents based on a role... and policy information” and “exchanging information between the agents in the virtual community using the defined virtual communication channel”, as recited in claim 27.

Therefore, new claim 27 is patentably distinguishable over Hodjat and Gupta.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

If there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: _____

8/9/15

By: _____



J. Randall Beckers

Registration No. 30,358

1201 New York Ave, N.W., Suite 700
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501